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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/587,092

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Steven R. Hoffman

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EXAMINER

BORLINGHAUS, JASON M

ART UNIT

PAPER NUMBER

3693

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

09/587,092

Applicant(s)

HOFFMAN ET AL.

Examiner

Jason M. Borlinghaus

Art Unit

3693

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 5, 7-9, 11, 12, 14, 15 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5, 7-9, 11, 12, 14, 15 and 23-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/23/06 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1, 4 – 5, 8 - 9, 12, 15 and 24 – 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rankl (Rankl, W. & Effing, W. *Smartcard Handbook*. John Wiley & Sons. West Sussex, England. 1997. pp. 21 – 23, 327 – 353 and 363 - 368).

**Regarding Claim 1**, Rankl discloses a smart card loading system (Mondex system) for loading value over a telecommunications network (telephone system) onto a smart card (Mondex smartcard) said smart card loading system (see pp. 342 - 344) comprising:

- a smart card (Mondex smartcard). (see pp. 342 - 344):
- a telephone handset (telephone with a built-in card reader) in communication with said telecommunications network (telephone system). (see p. 344);
- a smart card reader (telephone with a built-in card reader) for communicating with a said smart card when said smart is inserted in said handset. (see p. 344);
- said handset being arranged to generate a request message to load said value onto said smart card and to receive a response message to load said value onto said smart card. (During value transfer phase, Smart Card 2 informs Smart Card 1 of the requested sum. The requested amount is debited on Smart Card 1 and is sent to Smart Card 2). (see p. 346);
- an input interface (see wallet, figure 12.16, p. 344) for indicating a value to be loaded onto said smart card (see p. 344);

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- said handset being arranged to generate a message request to load said value (sum) onto said smart card ("value transfer" phase requesting sum) and to receive a response message (transmission of funds and digital signature) to load (credit) said value (sum) onto said smart card (see pp. 345 - 346.)
- a fund issuer computer (bank computer) arranged to receive said request message and to debit a consumer account with said smart card. (see p. 344);
- an authentication protocol arranged to receive said request and to authenticate said smart card whereby said smart card is authorized to load said value via handset (during "value transfer" phase Smart Card 1 checks authenticity of Smart Card 2, while a bank transfer requires submission of authenticating PIN number with transfer request). (see p. 346);
- whereby said smart card may be authorized to load said value via said telephone handset. (supra, see p. 344).

Rankl also discloses a smart card loading system for loading value over a network onto a smart card (inter-sector electronic purse) said smart card loading system comprising (see pp. 336 – 337):

- a smart card (inter-sector electronic purse – see p. 336);
- a fund issuer computer (PPSAM) arranged to receive said request message (first purse instruction). (see p. 337);

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- an authentication computer (PPSAM) arranged to receive said request message and to authenticate said smart card (authenticate signature  $S_1$  – see p. 337);
- whereby said smart card may be authorized to load said value via said terminal. (“Again, this only relays the data to the card, this time with the instruction CREDIT IEP.” – see p. 337).

Rankl also discloses a wireless system (GSM Network) comprising:

- a mobile telephone handset (see mobile equipment, figure 13.2, p. 363) in communication with said telecommunications network;
- said handset including a subscriber identification module (see SIM, figure 13.2, p. 363) that is separate from said smart card and functions to allow a user to access telecommunications network. (“The SIM’s task is to permit network access only to authorized persons...” – see p. 364);
- a gateway computer (mobile services switching center) arranged to receive said message from said handset over said telecommunications network and retransmit (forwarding) said message, said gateway computer (mobile services switching center) being further arranged to receive said message and to retransmit (forward) said message to said handset (mobile equipment). (see p. 363); and
- wherein said telecommunications network is a wireless network (see common air interface, see figure 13.2, p. 363).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the smart-card loading system (Mondex system), as disclosed by Rankl, by incorporating the standard computer network and protocols for smart-card transactions (inter-sector electronic purse), as disclosed by Rankl, to allow the smart-card loading system to utilize the standard and conventional technologies and/or protocols of such systems.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified the telephone smart-card loading system (Mondex system), as disclosed by Rankl, by incorporating wireless technology (GSM network), as disclosed by Rankl, since it has been held that making an old device or movable without producing any new and unexpected result involves only routine skill in the art. *In re Lindberg*, 93 USPQ 23 (CCPA 1952).

**Regarding Claim 4**, Rankl discloses a smart card loading system wherein:

- said authentication computer (PPSAM) authenticates said smart card (inter-sector electronic purse) using a first cryptographic signature (signature  $S_1$ ) and generates a second cryptographic signature (signature  $S_2$ ) to authenticate a load response (CREDIT IEP), whereby said transaction is secure. (see p. 337).

**Regarding Claim 5**, Claim 5 recites similar limitations to Claims 1 and 4, in combination, and is therefore rejected using the same art and rationale as applied in the rejection of Claims 1 and 4, in combination. Claim 5 differs from Claims 1 and 4 in that Claim 5 is for a smart card loading system further comprising:

- the smart card is able to be removed from the handset to interface with a point-of-sale terminal through a contact interface with the point-of-sale terminal.

Rankl discloses a smart-card loading system further comprising:

- the smart card is able to be removed from the telephone handset to interface with a point-of sale terminal (trader terminal) (pp. 344 – 345); and
- the smart card is able to interface with a point-of sale terminal through a contact interface with the point-of-sale terminal. (pp. 21 – 23).

**Regarding Claim 8**, Rankl discloses a smart-card loading system:

- wherein in response to a successful load (confirm successful updating), said handset (terminal) is arranged to generate a transaction certificate (signature  $S_3$ ) to be used for irrepudiation. (see p. 337).

**Regarding Claim 24**, Rankl discloses a method further comprising:

- removing said smart card from said handset ("telephone with built-in card reader" following value-loading). (see p. 344);
- placing said removed smart card ("the Smart Card") into association with a smart card reader ("the wallet"). (see p. 344); and
- using said smart card reader ("the wallet") to debit said smart card to perform a purchase. (see p. 344).

**Regarding Claim 9, 12, 15 and 25**, Claims 9, 12, 15 and 25 recite similar limitations as claimed in previously rejected claims, would have been obvious based upon previously rejected claims, or are otherwise disclosed by the prior art applied in



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previously rejected claims. Such claim limitations are therefore rejected using the same art and rationale as previously utilized.

**Claims 7, 11, 14 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rankl, as applied to Claims above, and further in view of Admission (applicant's arguments filed 10/23/06, p. 9) and Manterfield (Manterfield, Richard. *Telecommunications Signalling*. Institution of Electrical Engineers. London, England. January 1, 1999. p. 141).

**Regarding Claim 7**, Rankl discloses a smart card loading system wherein:

- said authentication response certificate (cryptographic "signature  $S_2$ ") is implemented within a telecommunications network which serves as input to the card (relays data to the card with the instruction CREDIT IEP). (see pp. 336 – 337)

Rankl does not teach that such certificate is implemented as an alphanumeric message integrated within a Short Message Service (SMS) message.

Manterfield and Admission disclose a system wherein:

- information is transmitted as an alphanumeric message integrated within a Short Message Service (SMS) message. (see Manterfield – p. 141 or Admission – p. 9).

It would have been obvious to one of ordinary skill at the time the invention was made to have modified Rankl to allow for any existing data transmission standard, such as Short Message Service, to be utilized as that the inventor desired for transmission of

the authentication response certification. *In re Kuhle*, 526 F.2d 553, 555, 188 USPQ 7, 9 (CCPA 1975).

**Regarding Claim 11, 14 and 23**, Claims 11, 14 and 23 recite similar limitations as claimed in previously rejected claims, would have been obvious based upon previously rejected claims, or are otherwise disclosed by the prior art applied in previously rejected claims. Such claim limitations are therefore rejected using the same art and rationale as previously utilized.

### ***Response to Arguments***

Applicant's arguments filed 10/23/06 have been fully considered but they are not persuasive.

**In response to the applicant's argument concerning *In re Keller* and Rankl**, Examiner accepts applicant's contention that *In re Keller* deals with piecemeal analysis of multiple prior art references and does not address piecemeal analysis of multiple embodiments disclosed by a single reference, as in the instant case. However, Examiner asserts that Examiner's recitation of *In re Keller* in regards to the instant case is appropriate in light of the spirit of *In re Keller* and applicant's attempt to engage in piecemeal analysis of the multiple embodiments disclosed by Rankl.

Applicant argues that it would not be obvious to simply combine the various systems. Specifically, applicant asserts, "it would not be an obvious matter to take the fixed loading systems of Mondex and the electronic purse, realize that a wireless GSM

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telephone exists, and then suddenly arrive at the present invention." Examiner respectfully disagrees.

Rankl discloses the use of various remote devices for loading of funds onto a smartcards via such devices as a trader's terminal, an electronic wallet and even "a telephone with a built-in card reader." (see p. 344). Examiner asserts that as telephone-based loading devices were already in use, that one with ordinary skill in the art at the time the invention was made would have utilized existing telephone-based technology such as a wireless GSM telephone. Such a combination would provide numerous obvious benefits such as the mobility provided by wireless telephone communication and the extra level of security provided by a SIM-based authentication system.

Applicant argues that the prior art references fail to "disclose any details of means by which value may be loaded onto a smart card in a wireless telephone over a wireless telecommunications network." Examiner asserts that prior art references, in combination, do disclose such a system, at least to the level of detail articulated in the submitted claims.

**In response to the applicant's argument concerning Manterfield,** Examiner asserts that Rankl discloses a telephone handset that performs a function (the loading of funds) upon the smart card placed therein and that the function is performed upon the device due to receipt of instructions (basic transaction data, crediting/debiting of value or exchange of signatures). (see pp. 344 – 346). Manterfield and applicant's own admissions establish that communication systems utilize SMS messages, which are alphanumeric messages. Examiner asserts that it would have been obvious to one of

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ordinary skill in the art at the time the invention was made to have modified Rankl by incorporating the encoding of transmitted instructions, as disclosed by Rankl.


Additionally, only Claims 11, 14 and 23 state that the SMS is utilized to issue a command. Claim 7 merely states that SMS is utilized to transmit input.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Borlinghaus whose telephone number is (571) 272-6924. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached on (571) 272-6783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

 2/6/07  
James Kramer